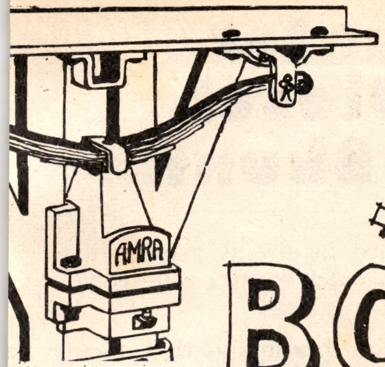


Editorial JOURNAL BOX

"Are You Guilty?"

Too often we hear the complaint "I went long to a meeting, but they are an unfriendly ot of so-and-sos".

I have to admit that occasionally I have een guilty myself — it happens all too often.

Does your branch or club have something rganised to cope with this problem?

A roster, or better still, one or two of the lder "diplomatic" type members allotted this ask, can easily overcome the problem. These members don't have to be "know-alls". Potential new members are mostly beginners whose problems are easily answered by most members, and there is always the "expert" around to introduce them to, which further accommodates the newcomer socially at the same time.

Australia has far too many different Model Railway organisations, which is undesirable to some extent, but no organisation can afford not to attract all the new members it can get.

And let's be honest — helping the newcomer is the most satisfying aspect of the hobby — go to it!

ALLAN DOWEL

COVER PHOTO:

Two S.A. 900 Class locos hauling a freight through the Mt. Lofty Ranges. (Photo courtesy "Railway Transportation".)

CONTENTS

The Diesel Shunter that Wasn't Diesel and Wouldn't Shunt 134
News from Other Clubs 136
Designing the Layout 137
Memories of Camden-Campbelltown Line 140
V.R. NBH Excursion Car 142-143
Constructing a Timber Bridge 144
Shop Spy 148
President's Desk 150
Third European Newsletter 151

CREDITS

Editor: Allan Dowel,
82 East Boundary Road,
East Bentleigh, Victoria.

Publisher: Norm Robinson

Art Work: Joseph Fenech

Typing: Mrs. Medlin

Printing: Maskell & Blake
Korumburra, Victoria.

Federal Secretary: CEDRIC ROLFE
Jeetho, South Gippsland,
Victoria.

Federal Treasurer: JACK TRESEDER
55 Creek Road,
Mitcham, Victoria.

Federal Registrar: M. R. Baker,
256 Reynards Road,
Coburg, Vic.

Cover Design: Jack Townley,
Korumburra, Victoria.

The Diesel Shunter That Wasn't Diesel And Wouldn't Shunt

by B. Rowling

(This article by an experienced "O"-gauger is presented mainly as a guide to scratch builders of all scales, as it exposes the points to watch for to ensure good running. — EDITOR)

After reading the article in the March-April Journal on my "O" gauge Midland Railway and noting that I had said my Budd-Caterpillar-GE shunter 7923 was useless for work and was mainly part of the scenery, the loco superintendent (that's me) said, "What a helluva way to run a railway! WHY won't it work?"

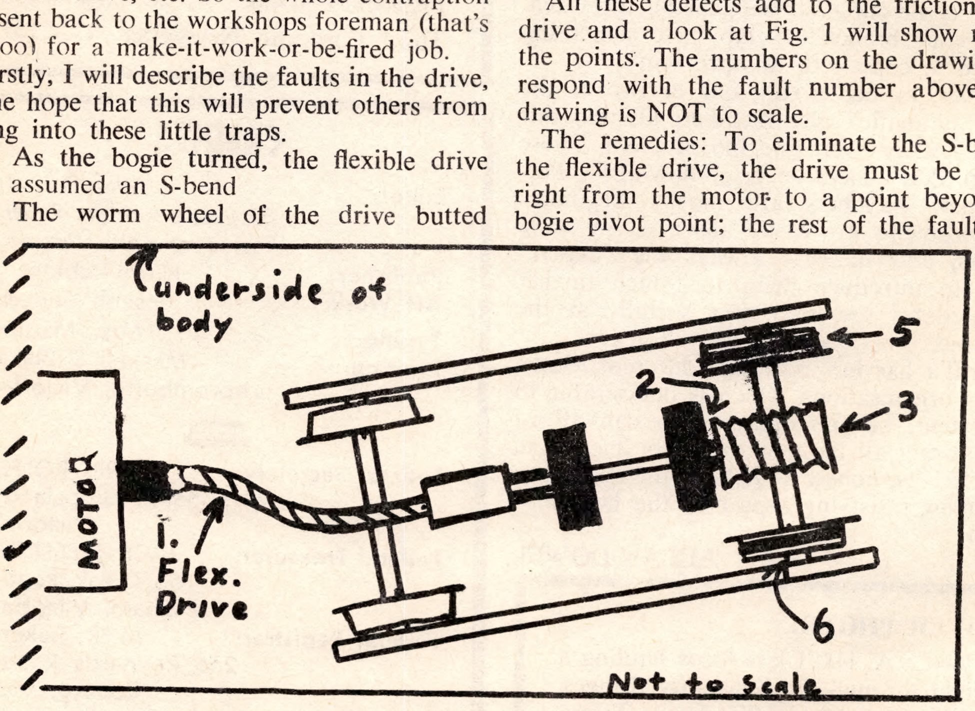
Well, the owner (that's me too) replied the whole thing is a mechanical monstrosity. I built it when I was an apprentice back in 1952 and didn't know much about the finer points of flexible drive, etc. So the whole contraption was sent back to the workshops foreman (that's me too) for a make-it-work-or-be-fired job.

Firstly, I will describe the faults in the drive, in the hope that this will prevent others from falling into these little traps.

1. As the bogie turned, the flexible drive assumed an S-bend
2. The worm wheel of the drive butted against its bearing so that a large fla face was rubbing against the worm
3. The gear ratio of 12:1 was not enoug reduction
4. It drove on one only axle, and
5. This axle had rubber tyres, which didn' help electrical conductivity
6. The driving axle had outside bearing and the side thrust on the axle (cause by the worm gear) was taken against th face of the wheel.

All these defects add to the friction in th drive and a look at Fig. 1 will show most o the points. The numbers on the drawing cor respond with the fault number above. Th drawing is NOT to scale.

The remedies: To eliminate the S-bend in the flexible drive, the drive must be flexible right from the motor to a point beyond the bogie pivot point; the rest of the faults also,



Before Modification Fig. 1

uld only be corrected by rebuilding the wer bogie.

The only parts salvaged were the bogie side ames, wheels and axles. I do not propose to t a conversion process here as every bogie "O"-gauger possesses is probably different. stead, I will describe the finished product hich is sketched in Fig. 2 and appears to have ercome all the problems.

A set of frames of ¼" x ¼" brass mounted side the wheels actually carries the engine eight, the axles being cut off flush with the tside of the wheels and the original bogie des remounted simply as dummies for appearnce.

The junk box provided the necessary gearing, at is the new worm gear set (19:1 ratio) and train of gears salvaged from an old telephone al and an old telephone generator.

Of course, not everyone has such items in s junk-box, but some secondhand tool or sposal stores do carry useful gears. Care was ken during assembly to fit steel washers at all earing points against brass, e.g., at the worm heel bearings and on the axles so that the side face of the wheels would not rub against e inside frames.

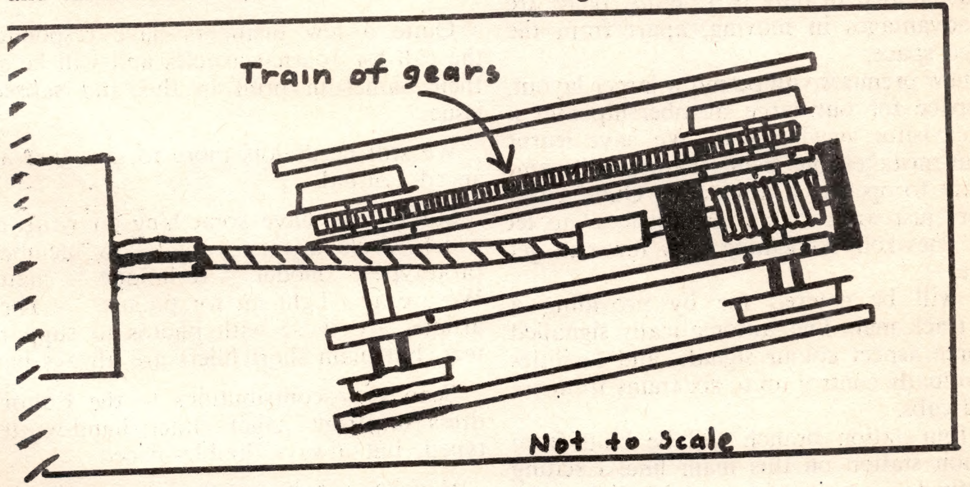
Now the rubber tyres: these troublesome deices are being gradually eliminated from the ystem and 7923 was included in the programme. I mounted each pair of wheels in the athe and turned about 3/16" off each tread diameter, then turned and pressed steel tyres to the alloy wheels.

Next on the programme came the motor. This is an old windscreen wiper motor whose bearings have seen PLENTY of work, but none-the-less were of brass and apparently moulded into the die-casting of the motor frame. The worst worn one was at the cummutator end of the shaft, but fortunately there was sufficient shaft protruding to allow an additional bearing to be soldered on to the face of the existing one. The other bearing was judged to be only in fair condition, but as a real major job would be involved in improving it, I decided to leave it as is.

After all this effort, a glaring omission from the body was noticed — it had no handrails! These were fabricated from 18-gauge hard-drawn monel metal wire, soldered where required to uprights and into holes drilled in the body. Off then for a repaint and 7923 was ready for the road.

To the old hands of "O" gauge, most of these notes will be "old hat" — many of them were advocated and used before I started modelling and I present them here in the hope they will prevent some poor unfortunate from falling into traps that can ruin the performance of an otherwise reasonable model.

The difference in performance has been fantastic: 7923 can shunt about the same number of wagons as my 38 which is, on my shocking



After Modification Fig. 2

track with 4' radius curves and 1 in 30 grades, about 20 wagons. Before conversion, it was lucky if it would pull one wagon.

Finally, a word to any new scratch-builder. Have a chat with someone who has built and operated successful models BEFORE you start construction. Believe me, it is very disappointing to find that your latest and newest product (your first scratch-build) is a failure and can easily be out-performed by an 0-4-0 Hornby toy!

News From Other Clubs

MELBOURNE MODEL RAILWAY SOCIETY

We have most exciting news at the moment. The club has moved to much larger premises at 80 Coppin Street, Richmond. We now have two main rooms, one 1147 square feet in area and the other 552 square feet.

A layout, which was approved by the membership at a special general meeting, will be built in the larger room. The smaller room will be used for a workshop, tea-room, display room, portable layout assembly and "just talking about trains".

Although it was sad to see about two years' work dismantled in only two nights, there are many advantages in moving, apart from the increased space.

The new premises will permit a larger layout, more space for our large membership and a separate visitor viewing area. We have learnt from our mistakes, one being that not all members want to operate to timetable. Quite a few members just want "wide open spaces" to let the big ones roll, something very few can get at home.

This will be catered for by providing a double track main line, automatically signalled with three aspect colour signals, and facilities to individually control up to six trains from six elevated cabs.

The four-station branch will be built from a junction station on this main line. Exciting new methods are planned to speed building and it is hoped that articles on these methods will appear in A.M.R.A. Journal very soon.

With our much larger membership, n methods, two years' experience and mu equipment salvaged from the old layout, it confidently expected that we will be runni very quickly.

TED FROST, Secretary.

AUCKLAND METROPOLITAN MODEL RAILWAY CLUB

Henceforth to be known as A.M.M.R.C. N.Z.

(First of all we welcome news of a N Zealand Model Railway club to Journal a we hope to hear from them regularly.)

The annual Exhibition was held duri National Model Railway Week, August 19- inclusive - the first week of the school holida and the Museum was most generous in allo ing us one-third of the total gate takings du ing that time.

The competitions went off reasonably we but as usual, there was not a large numb of entries but the judges were impressed wi the high standard.

ALAN CURTIS, Secretary.

SEE YOUR NAME IN PRINT

Quite a few members have responded t the call for Journal articles and will be seein their names in print in this and subsequen issues.

We still needs lots more to give you a bal anced Journal.

Surely you have something to write abou which would interest your fellow members — prototype — model — technique — material We are also light on for photos. The bes articles are those with photos to support th text, but plain short fillers are always handy.

Send your contributions to the Editor (ad dress on front page) either hand-written o typed, but always double-spaced.

Sketches can be rough pencil or finished i Indian ink.

See Secretary's Desk.

Designing The Layout

Second of a series for beginners by Allan Dowel

he Common Error

The first train-set comes with a circle or val of track, and is almost invariably extended to a larger oval, with a passing loop or per-aps just a spur siding.

This, unfortunately, influences the average eginner into thinking that most model rail-ays, therefore, consist of a board or table, ith a large oval (or two) and various config-rations of sidings and loops inside the ovals.

This is O.K. up to the point which is absol-tely necessary to get the train running, or for ne-piece portable layouts. The beginner should hen start to look at the disadvantages —

1. Curves too sharp
2. Siding length limited
3. Very short run
4. Not enough length to install reasonable grades
5. High cost of large sheets of basebard
6. Un-railway-like layout

If we are to advance from "playing trains" o "operating a model railway", then we must ook to the prototype for the answers.

We can never hope to simulate the length f track or size of the countryside in real life. However, within the prescribed limits, every ttempt should be made to copy as much as ossible.

inding the Space

Every avenue should be explored to find a uitable space. Some popular solutions are —

1. Around the inside of the garage
2. Around the walls of a bedroom over low cupboards
3. In a basement or attic

(Ceilings should be avoided because of large temperature variations and dust).

The above solutions are often more easily found than space to erect a "table" type lay-out and have greater possibilities of becoming permanent, or perhaps permanent in the main, with a lift-out section or lift bridge across a doorway.

What we are looking for is length rather than width. A very satisfactory layout can be built on a surface only one foot wide, in fact 10 inches will accommodate two tracks and two 3" wide platforms.

Length is increased by following the perimeter of the available space and can be further doubled by going twice around (mainly on different levels). See Fig. 1.

If the wall is very long, such as in a garage, one wall can carry a "dogbone" layout, such as shown in Fig. 2.

Point to Point or Continuous

The arguments for and against "point-to-point" or continuous layouts are endless. Point-to-point is prototypical, but one gets very tired of turning trains around after a very short run.

The answer, I believe, is to have both, which can be used point-to-point, including a "few times around" to lengthen the run, or just around and around whilst admiring the performance of that new loco.

My experience with a club layout of four scale miles point-to-point is that quite a few members still wanted a continuous run. The layouts in Figs. 1 and 2 both allow point-to-point or continuous running.

Grades

If "centre oval' layouts are the first mistake made by newcomers, then grades which are too steep is the second. One can have grades that are steeper than prototype only because model trains will often be shorter than real trains.

A grade of 1% (1" rise in 100") is quite a pull for a real train and it is also quite a good pull for a scale length model. Thus, if you can go for 2% (1 in 50), then your trains will have to be about one half of the real length (say five coaches). Likewise, a grade of 4% (1 in 25) will limit even the most powerful locos to two or three coaches.

However, it is better to run such a train twice around a room with grade separation than restrict the design of the layout. Assuming a minimum rise of 3 inches to cross another track, even a steep 4% grade needs 6' 3" from bottom to top.

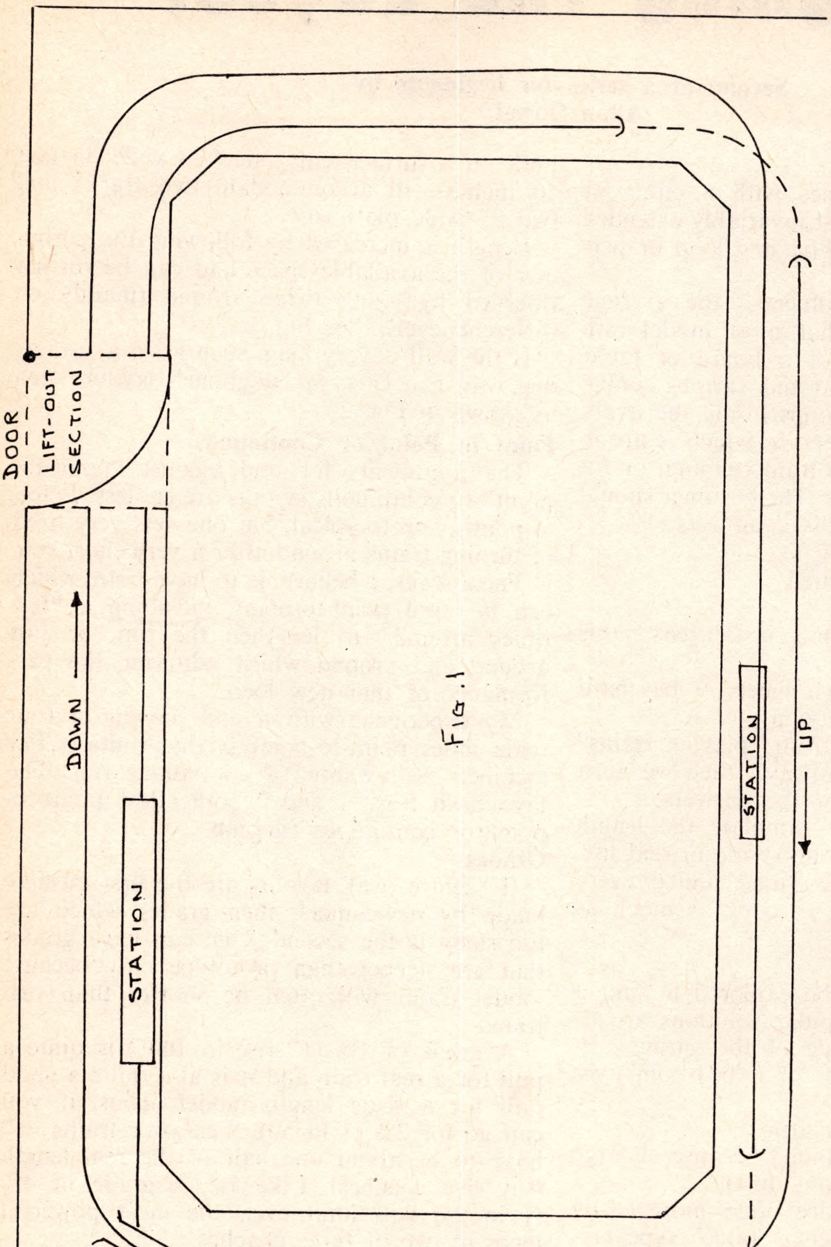


FIG. 1

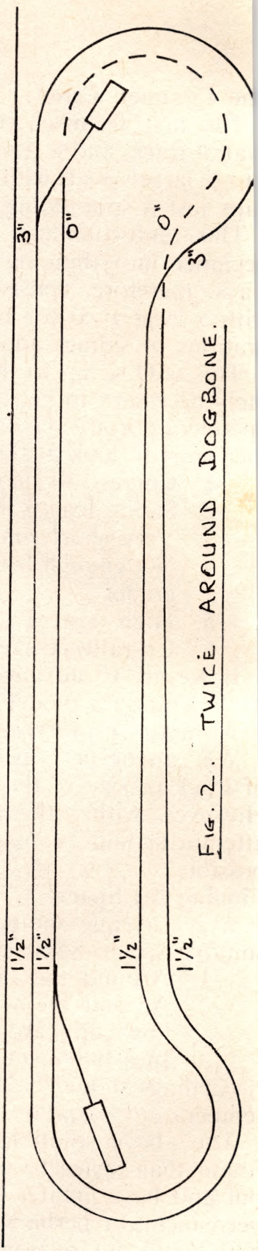


FIG. 2. TWICE AROUND DOGBONE.

A trick that can be used, of course, is to ake one track up $1\frac{1}{2}$" and the other down $1\frac{1}{2}$". A little extra should be allowed to "start" and 'finish" the grade.

The main line between stations should be single track in all except the largest layouts, for three good reasons —

(a) We can only hope to model small railways and a small railway usually has single main line;
(b) Double track shortens the appearance of the main line, and single track looks longer;
(c) Single track is far more interesting to operate.

Station Design

Just a simple main line is interesting to operate, so is a station with a simple layout.

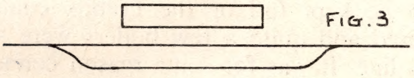


FIG. 3

Fig. 3 will provide all the necessary facilities for turning a train, whether used as a terminal or through station. This assumes, of course, that locomotives do not have to be turned. This is a good reason for using tank or double-ended diesel locos.

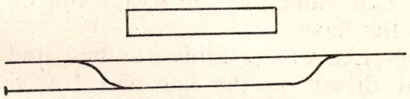


FIG. 4.

Fig. 4 will allow a few vehicles to remain at the station without upsetting the turning process too much.

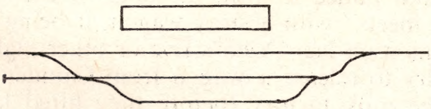


FIG. 5

Fig. 5 would meet the needs of most little country towns and would permit one train to be turned or shunted whilst another rests or arrives and departs.

From then on, it is mostly a matter of individual choice. Some members would be quite satisfied with Fig. 5. Others may want to add an industry or two, whilst some can't resist the temptation to build huge goods or passenger terminals. If you have the necessary space, know-how and cash, that is O.K., but definitely not necessary for interesting operation.

You should aim for three stations if possible, as this will give point-to-point operation with the interesting complication of passenger trains en route. Three small stations would certainly be preferable to two larger ones. Also, three short stations are preferable to two long ones, just as two short trains are better than one long one.

Industries.

One should set out at the beginning to use some logic in relation to rolling stock and industries. If you already have a fair selection of vehicles, then establish industries that can logically require those vehicles for incoming or outgoing traffic. Open wagons and goods vans can be used for almost any solid load. Have a good look at the real railway for the clues on industries and types of wagons.

Curves

Whilst train-sets come with curves as low as $13\frac{1}{2}$" in radius and trains are designed to cope with these curves, every effort should be made to improve on this. There are no standards or limits, it is just a matter of fitting in curves with as big a radius as possible, at least where the track is exposed. I personally consider that 24" is the lowest radius curve that should be used for exposed main line track in HO or OO.

If your impression after reading the foregoing is "that's O.K., but I just haven't got any such space to use", then perhaps your answer lies in "N" scale equipment. This scale — 2 m.m. to 1' on 9 m.m. gauge track — is the most serious contender to HO and OO scales for many years, and there is already a wonderful supply of equipment available from many sources, certainly enough to build an extensive layout, at prices no dearer, and possibly cheaper than equivalent quality HO and OO scale equipment. With this equipment, one could even revert to the "one-piece" portable layout, perhaps folding against a wall.

Curves can be sharper and station tracks shorter and closer together, but stations cannot be placed much closer together than for HO/OO. This is because the eye can see much more of the scene at once in N scale.

So there it is. There should be a possibility in the above for anyone to have a permanent or portable layout.

Memories Of The Cambden -Campbelltown Line

by Broughton Boydell

Although I knew there was a short length of 1 in 18, I was never sure of where it was until quite recently when I came across an article in April, 1963 Australian Railway Historical Society Bulletin, and it appears that the 1 in 18 is the short down grade after ascending the 1 in 20 up Kidds' Hill. I suppose I should have guessed it because after a quick descent from Rudd's Gate, the tram, if loaded, very rapidly lost speed and toiled to the top of Kidd's Hill.

When I wrote the article, I believed tramway locos and "B" class tramcars were allotted to the line. The "B" class tramcars, as I knew them, were cross-bench W toast-rack-type cars, but I have found the "B" class car of that time was similar to the "KA" class, but fitted with all seats and no baggage compartment as in the "KA" class.

These "B" class cars, although similar to N.S.W.G.R. suburban cars, were shorter, being only 37 feet long and fitted with link and pin couplings for tramway locos.

The cars I know as "B" class or steam trailer tram cars were at that time classed "C2" class.

On the occasions of the religious ceremony at Marylands, not only was the Campbelltown-Narellan section broken at Marylands, but another was set up at Kenny's Hill, to hold the tram if not given the right-of-way by Marylands. Two temporary staff sections were set up — not one.

The high standard that this line was built to was shown by the fact that "41" class diesels operated on it. The use of this class of loco was very restricted because of the 21-ton axle loading, yet they operated on this line.

The loss of the coal traffic was not the real reason for closure of this line but the deterioration of the Camden bridge.

Driving on this line called for special skill, as once you topped a steep grade, you immediately went down a steep grade and as the consist usually included four-wheel trucks with three-link couplings, the drivers had to top a hill and then let all vehicles gently roll together. When they bottomed a grade, al couplings then had to be gently pulled ou tight. Several of the regular drivers were ver good, but if ever we had a relief driver, you usually went from one end of the line to the other in a series of bumps and jerks as the buffers came together.

Although "20" class locos usually worked this line, the drivers preferred the first locos of the class as the later were rebuilt "A93" class and the slightly longer wheelbase was not popular.

Due to the steep grades, the boiler always had to be kept full or the firebox could be uncovered and quite a few boilers were spoilt on this line. It was for some reason connected with this that the "20" class were the mainstay of the line.

The day after the line was officially closed, the A.R.H.S. ran an eight-car special over the line with two "20" class locos in front and a "30" class pushing behind. For the occasion, Driver Lea came out of retirement to drive one of the locos.

Driver Lea was possibly our best and most popular driver on the line and I wonder if he told the assembly of the time he took "the tram" down the up relief road and through the dead-end; of the times he hitched a rope to a bogged vehicle, before the road was asphalted, and pulled it from the bog; of the "cornfield meets" with a stray wagon, it being quite common on New Year's Eve or other nights of revelry to release a wagon from Camden yard or the milk factory (before they fitted locked slip-points) and let it go. It usually stopped in a dip before the bridge, but quite often on the bridge . . . so on foggy mornings, the driver of the first "tram" of the day kept a sharp lookout; of the time we met a local identity — Ma Kelly — at the bottom of Curran's Hill and on stopping and asking why she was walking, we were told: "Me old man's belting me." We then had to get Ma Kelly, who was anything but steady on her feet, aboard the tram. A half-mile up the road, we met Pa Kelly, sound asleep in his sulky, while the horse zig-zagged p the road. All were thoroughly abused when e put Ma off at Kenny's Hill.

I wonder if Driver Lea remembered getting ie green flag one day at Kenny's Hill and iaking a quick get-away and leaving "Kingy" Guard King) in the middle of the line with s pants down! The next morning, four school- oys had their railway knowledge improved y Campbelltown station master (Waters) — o train is supposed to move without a guard.

To those who knew it, especially years ago, here never was and never will be, another train ke the old Camden Tram.

Pop Valve

ear Editor,

The Wimbledon Club claim (see London ewsletter in May-June issue) is a hardy per- nnial and Cyril Freezer, the Editor of "Rail- vay Modeller", gave a lot of time to it. My etter was based on one of his quite recently o Manchester Model Railway Society. The ther clubs mentioned operated right through he war.

The Model Railway Club, I think, missed nly about three meetings, and considering air- aids — Manchester missed only one meeting — I feel they did very well.

Broughton Boydell.

ear Editor,

I got a real kick out of winning the best rticle prize (the "O" gauge tram service) and he best photo (of my "O" gauge layout).

Thanks for the excellent prizes — two "HO"!! gauge buildings.

Brian Rowling

Sorry, Brian. All of our prizes are for "HO" layouts. If you just have to persist with "O" gauge, you will have to swap them, or as you suggested, make use of perspective and put them way up on "Green Hills"!

Editor

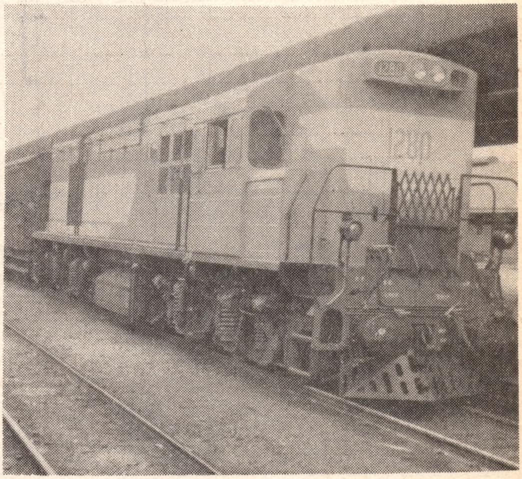
JULY-AUGUST JOURNAL:

Best Article: The Toughest Railway on Earth by Francis Sibson.

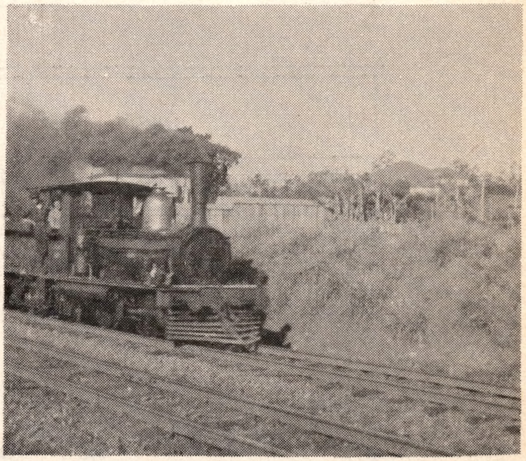
Congratulations, Francis. I would hate to have an article competing in the same issue with you. One of the judges badly wanted to include your drawings in the photo comp., but I thought it might be stretching the "terms of reference" a wee bit. I wonder how many members realised that the two illustrations were actually drawn by you?

Best Photo: Page 106. 3830 and 3813, a very nice shot indeed, by Hayden Holmes.

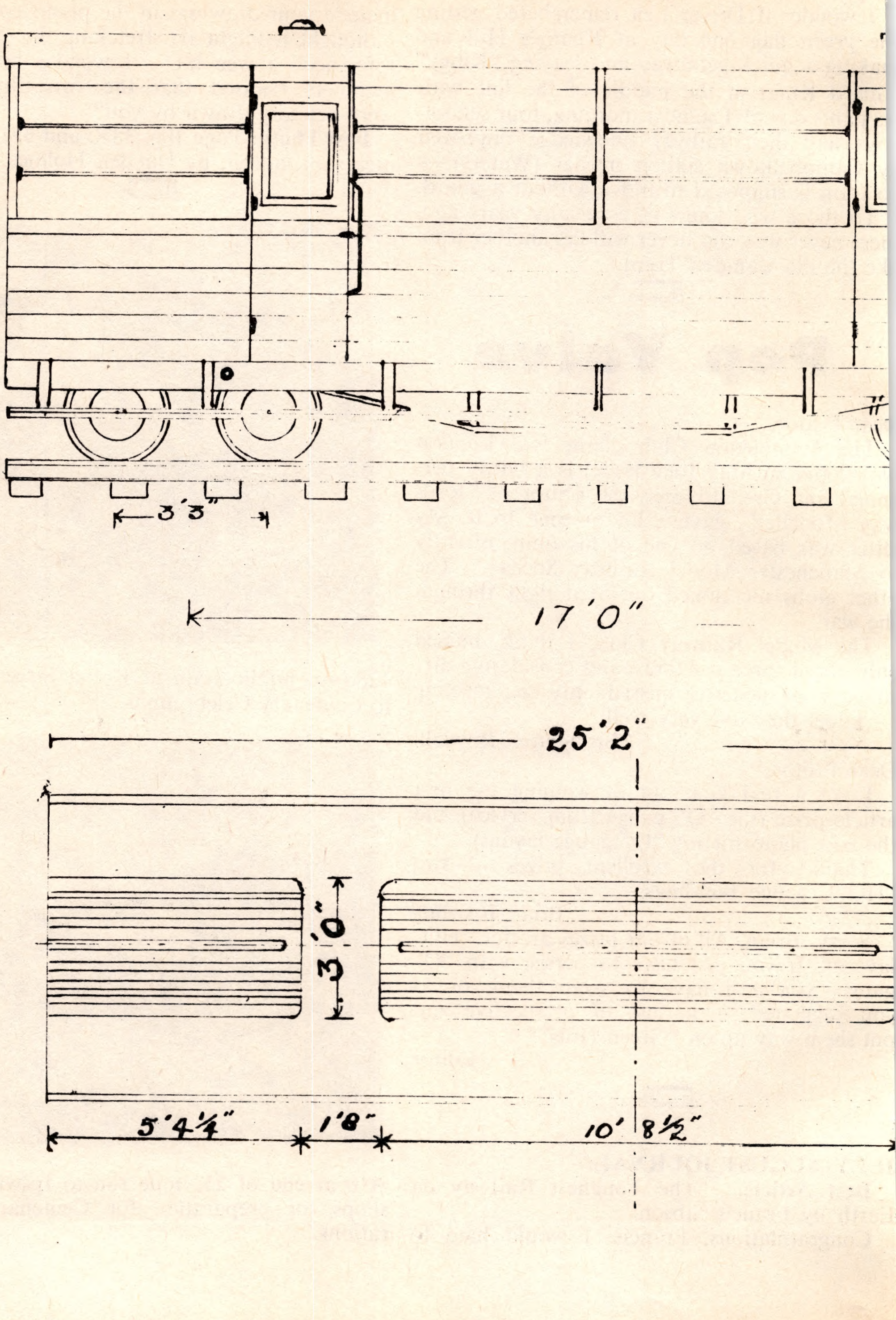
* * *

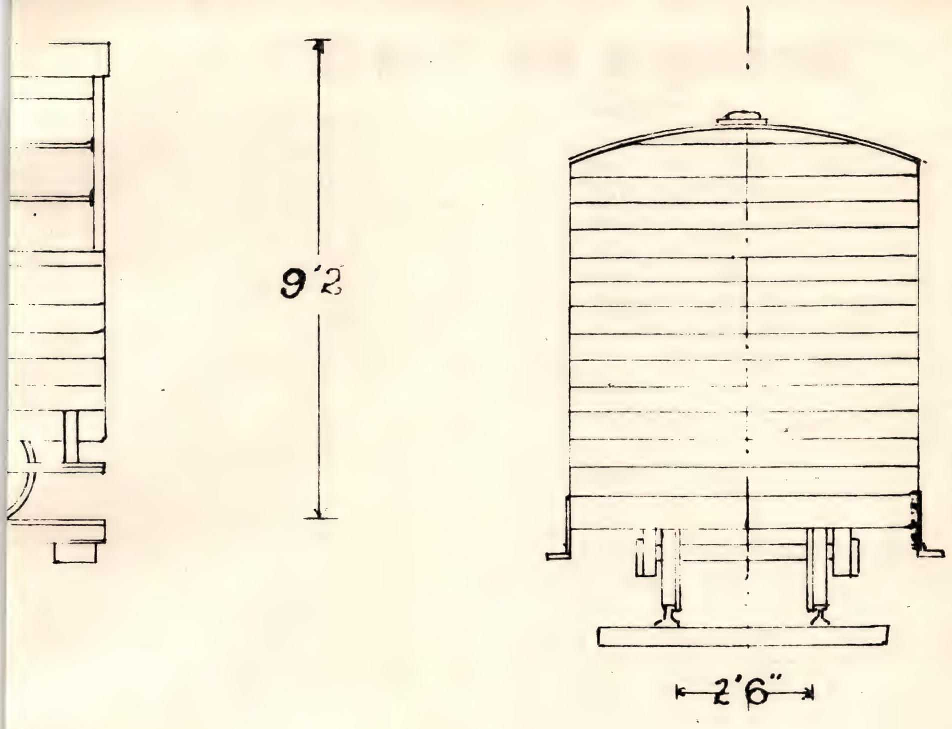


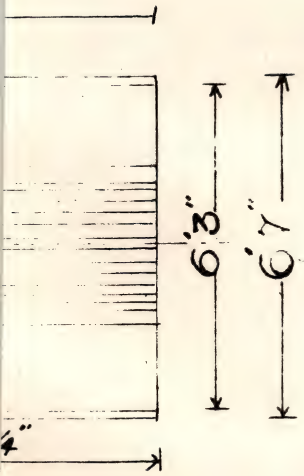
1280 on public train at Roma Street on way to Centenary Celebrations. — C. Wall



A10 at end of 252 mile run to Ipswich workshops for preparation for Centenary Celebrations. — C. Wall


3'3"
17'0"
25'2"
3'0"
5'4¼"
1'8"
10' 8½"





VICTORIAN RAILWAYS

2' 6" Gauge

EXCURSION CAR

Prefix NBH

DRAWN	J. A. BALL
DATE	AUG. '66

Constructing A Timber Trestle Bridge In "HO"

by M. Dixon

To build this bridge, it was necessary to measure a prototype and in this case it was situated at Oakhampton, four miles from Maitland where I live, 124 miles north of Sydney on the North Coast Line of the New South Wales Government Railways. This line forms single track just outside Maitland at Telarah and is the route of the Brisbane Limited Express and other mail and freight trains.

A few facts on the line may be of interest at this point. The ruling grade is very easy at 1 in 75, and between Telarah and Taree, a distance of 115 miles, the longest straight stretch of track is at Killawarra: 1 mile 6 chains in length.

The running times are reasonable considering the curving nature of the track which, as you can imagine, considerably limits any sustained high speeds. Two examples are No. 1 Brisbane Limited Express which takes 176 minutes for the 116 miles from Maitland to Taree, and No. 401 Express Goods which takes 200 minutes.

Contrary to views held by many, timber trestle bridges are quite strong and will carry heavy loads at high speeds. For instance, the trestle used as a prototype has a speed limit of 70 miles per hour and goods trains reach 1,000 tons for a single unit 44 or 45 class diesel electric locomotive, or 1,500 tons for two 48s or equal to 70 in length.

So it is obvious that a timber trestle is not out of place on any layout old or modern and, furthermore, it can be of any length desired, on a curve or straight, over solid ground, swamp or creek, and can carry any type of traffic. What more could one want?

I constructed my trestle from $\frac{1}{8}$" square King William Pine which is very slightly undersize, and scraps of balsa. All the uprights are of pine, but the diagonal braces and the top and bottom plates are 1/16" balsa sheet cut into $\frac{1}{8}$" wide strips and cut to length as desired (Fig. 1). It shows full-sized dimensions for anyone who feels enthusiastic enough to build this bridge.

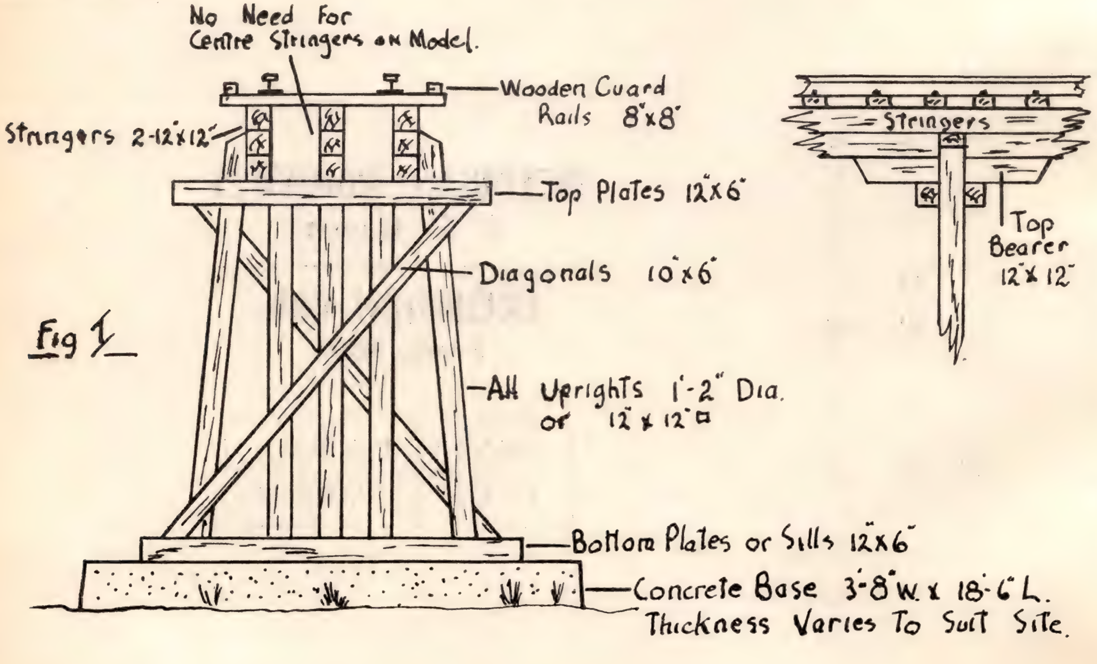


Fig 1

No Need For Centre Stringers on Model.
Wooden Guard Rails 8"x8"
Stringers 2-12"x12"
Top Plates 12"x6"
Diagonals 10"x6"
All Uprights 1'-2" Dia. or 12" x 12" □
Bottom Plates or Sills 12"x6"
Concrete Base 3'-8"W. x 18'-6"L. Thickness Varies To Suit Site.
Stringers
Top Bearer 12"x12"

I decided to construct a jig to make the ers, as it would be rather difficult to keep 13 l the same if made by hand. To make the g, I took a flat piece of 3-ply and drew on it e highest pier which I would require. I then ut small pieces of 1/16" thick balsa to the ght shapes and stuck them in and around e outline, so that all the various pieces could e fitted in and glued while in position and en lifted out when dry. Care must be exer-ised to see that piers do not stick to the jig.

First, the track was installed in position on emporary piers and bits of packing, the ap-roaches having already been completed. Mine s on a grade of 1 in 48 and has a 36" radius urve at one end on to an Airfix girder bridge hich has been widened by $\frac{1}{4}$" to allow for xtra overhang as locos come on to it.

The length of the trestle I constructed, ex-luding the Airfix girder bridge, is 4' 10" and t the highest point, the track is $3\frac{1}{2}$" from the round.

Now to actual construction. I built the entre pier first, and then worked out each way from there. The height of the pier required was measured and a line drawn on the jig to indicate length of timber needed, allowing $\frac{1}{8}$" less for concrete base.

This dimension is taken from the top of the jig, not the bottom, because the width must remain constant at the top, but the bottom width varies according to the height of the pier owing to the angle at which the two outside uprights are set.

As mentioned previously, my bridge is on a 1 in 48 grade, so each pier was a different height. This helps to make the job even more interesting.

The height of each pier is not very critical as the thickness of the concrete base may be varied a little to suit.

Next, five pieces of King William pine were cut and slipped into the jig. Note that the two outside uprights which are set at an angle are slightly longer than the other three. A piece of $\frac{1}{8}$" x 1/16" balsa was cut to length for the top plate and glued on, using Britfix 66 balsa cement. After allowing a few minutes to dry, the bottom plate was then fixed. Then when both were dry, the centre plate was glued

Double Braced Pier Before Stringers and Top Bearer are Fitted.

General Dimensions Same as Single Pier.

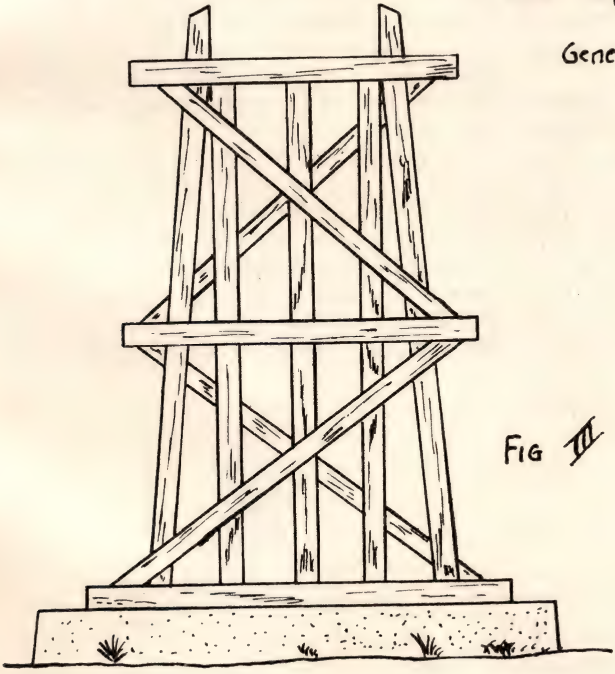


FIG III

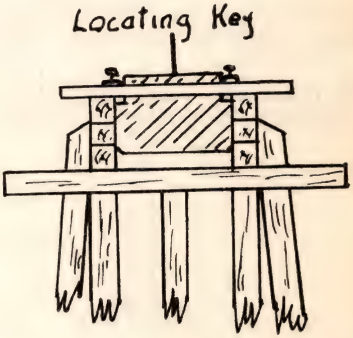


Fig. IV

in position.

I used double bracing as shown in Fig. III only on piers over 2¾" in height. This is not strictly to scale, as double bracing is used on piers over 11 feet high, but this looks far too bulky on a model, so a little licence was taken to improve appearance.

After top, bottom and centre plates have set firmly, the diagonals ⅛" x 1/16" were then cut to the right angles and lengths and glued in position. When all the glue was dry, the pier was lifted out and the jig was ready for another.

After removing the pier from the jig, it will be found that the same operations will have to be carried out on the opposite side. Note that diagonals on opposite sides are at opposite angles. When the pier is complete, it is glued on to its concrete base.

This operation requires more care than any other operation on the entire bridge, as piers must be perpendicular both ways. The finished appearance of the bridge depends on whether this job is done correctly or not.

When sufficient piers had been constructed, 13 in my case, I glued piers numbered 3, 7 and 10 on the baseboard. The number of piers required will, of course, depend on how long you build your bridge, the distance between piers is 24 feet on the centre lines as shown in Fig. V.

Then two lengths of ⅛" square King William pine were glued together to form the stringers, care being taken to keep them straight. They were then placed on the top bearers which are 1-1/16" long and glued in position. This operation was repeated for the other side, care being taken to keep them level crosswise.

After the stringers were glued down and set, the remaining piers were set in place and any adjustment in height was made by altering the thickness of the concrete base. If reasonabl care has been taken during the various stage of construction, it will be found that ver little adjustment will be required.

The track was then set on the stringers an I did not screw it down at all. The only forn of fixing is three balsa keys which I have gluec to the stringers and which protrude up betwee the rails slightly, as in Fig. IV. These key stop any tendency for the rails to move sideways, and as rail just slips over the keys, i can be removed if required just by lifting off

I use Peco Streamline track and have bee operating over the trestle for about eigh months and have found that no further fixin is necessary.

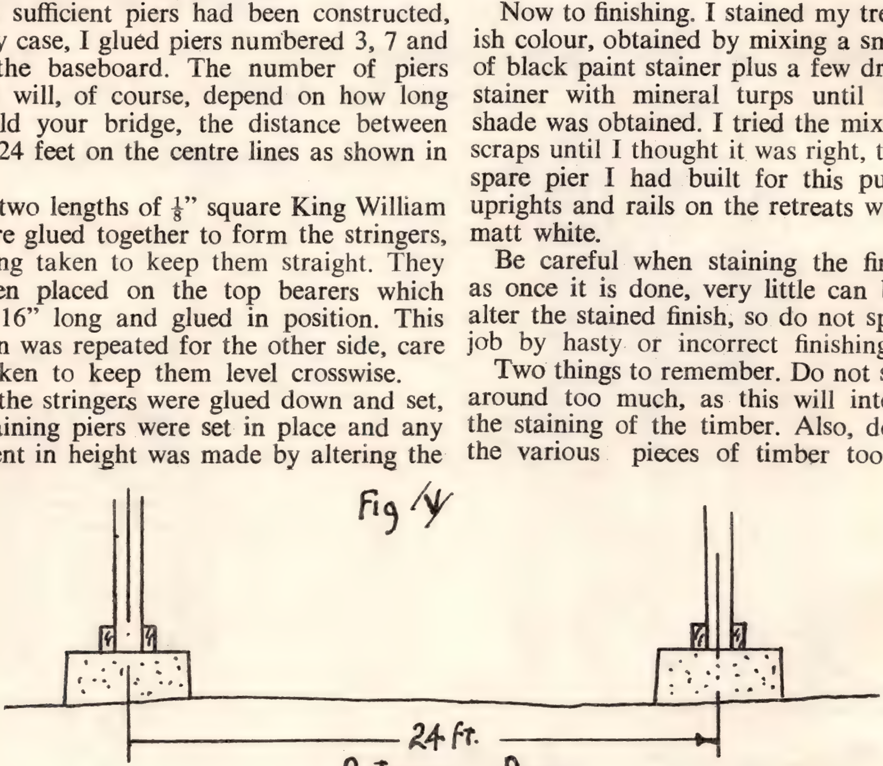
Last, but not least to be made, are the retreats. They are spaced out here and there fo fettlers, bridge carpenters, etc., to take refuge in when a train approaches. I fitted two to my bridge, equally spaced. I have enclosed a sketc only of retreats. They should be self-explanatory: see Fig II.

Now to finishing. I stained my trestle a greyish colour, obtained by mixing a small amount of black paint stainer plus a few drops of blue stainer with mineral turps until the desired shade was obtained. I tried the mixture out on scraps until I thought it was right, then I did a spare pier I had built for this purpose. The uprights and rails on the retreats were painted matt white.

Be careful when staining the finished job, as once it is done, very little can be done to alter the stained finish, so do not spoil a good job by hasty or incorrect finishing.

Two things to remember. Do not spread glue around too much, as this will interfere with the staining of the timber. Also, do not sand the various pieces of timber too much, as

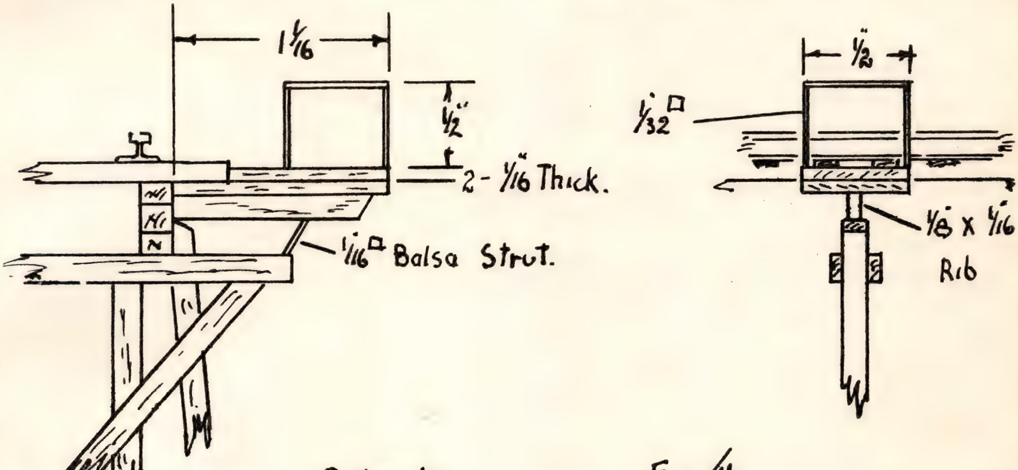
Fig IV



fairly rough finish looks better than a smooth ne.

I hope this article helps some modellers al-ng the road of timber trestle construction. A noderately difficult model to construct cor-ectly perhaps, but a most rewarding one. It s quite a sight to see a double-header coal rag drifting downgrade across a timber trestle, particularly when it is built to scale, as it retains the rather inadequate appearance of the real thing. You will also find that everybody, modeller or not, will admire your hand-made bridge.

I hope I have covered everything, but if any-one wants any more information, just drop me a line and I shall endeavor to assist.



Retreats Fig 11

A.M.R.A.

Statement of Receipts and Expenditure for year ending August 31, 1967

ECEIPTS:		
ank Balance 31-5-66	219.10	
etty Cash on hand 31-5-66	30.00	
		249.10
ew subscriptions		120.75
enewals		732.73
onations		30.42
ale of badges		14.00
ale of Journals		1.90
ale of Traction Publications		75.80
ale of scrap plastic		97.95
nsurance commissions		15.53
dvertising		387.65
ank interest		8.17
Typewriter hire		33.50
oining fees		17.85
		$1785.35

EXPENDITURE:		
Journal		1114.64
Stationery		100.75
Postage		94.19
Typewriter repairs		27.50
Purchase of Traction Publications		51.91
Purchase of scrap plastic		44.20
Addressograph ribbon		1.35
Insurance		5.61
Duty stamps		3.00
Insurance benefits to N.S.W. branch		2.26
Subscription to "Green Over Red"		1.00
Bank balance 31-5-67	288.95	
Petty Cash on hand 31-5-67	50.00	
		338.94
		$1785.35

Shop Spy

SYDNEY HOBBYSHOPS

Hobbyco Pty. Ltd., 561 George Street, Sydney, 2000 (Phone 61-9655) have a full range of Eggerbahn, Lima, and Arnold Rapido "N" gauge equipment. A new item in Arnold Rapido is an electric express loco, Cat. No. 0233.

Most Peco "N" gauge lines are in stock together with Peco HOn2½ track and points. The track is sold in 18" lengths. Most "HO" lines are in stock.

A couple of new items caught my eye, these being a Kumata brass DL640 Alco unit and an SD45 G.M. demonstration loco.

J. Searle and Sons, 315 Pitt Street, Sydney, 2000 Phone 25-5737) again have the popular Crown series. A large range of K.T.M. motors is available, including a motor bogie set, suitable if you desire to build a rail motor. Shinohara track and points are again in good supply — also Eggerbahn "N" gauge.

The Fantastic Hobbyshop, No. 34, Angel Arcade, Ash Street (near Palings), Sydney, 2000 (Phone 28-2318) also have quite a good range of Eggerbahn and Lima "N" Gauge, together with Vollmer "N" gauge kits just to hand. Fantastic have just received a new loco from Tri-ang, the R.754 with hinged smokebox, glowing firebox and smoke unit.

Berg's Hobbies, 111 Macquarie Street. Parramatta, 2150 (Phone 635-8618) have most lines in good supply, including Tenshodo freight and passenger bogies and Sentinel parts. A special noted there was a 2-6-6-0 Allegheny loco, painted ready to run. This is a real bargain considering they are normally unpainted.

Coming shortly is a 10.5 m.m. spoked wheel of Japanese manufacture with a pin point axle and is close to RP25 contour. These may have arrived now.

North Shore Hobbies Pty. Ltd., 8 Post Office Street, Pymble, 2073 (Phone 449-2656) have available at the moment a limited number of Tri-ang R332/3 Clerestory Roof Coaches at a greatly reduced price. These are suitable for conversion to N.S.W.G.R. "dogboxes".

They also have a full range of Lilliput rolling stock kits and some new lines in the Lima HO range.

Sydney Model Railroad Supplies, 4 Rees Street, Belmore, 2192 (Phone 78-6645) have a large range of brass equipment as well as the usual lines. Negotiations are under way for American prototype "N" gauge to be marketed in Australia.

More information may be to hand next issue.

MELBOURNE

The Melbourne Sports Depot is very proud to announce that they have moved to much larger premises in the new building at 121 Elizabeth Street (corner of Little Collins St.).

Vic Hobbs tells me that they have over six times as much space for the Hobbies Department and will have an operating layout. All this is very good for the hobby.

He anticipates that a full range of Peco products should be on the shelves about the time you read this (not counting the "Wonderful wagons" which are unavailable).

At the Model Dockyard, 216 Swanston St., Melbourne, the balance of the N.E. wood shapes is in stock. These are scribed sides, car sides, rooves and floors, etc.

They tell me that more Big Boys, both "O" and "HO" scale should be in by the time you read this.

Vincent's Pharmacy at Fairfield have had to give away the model railway department due to pressure on the pharmacy side of the business. Vincent, who is an active member of both A.M.R.A. and M.M.R.S., has given a wonderful service to members of both clubs. His business will be missed.

ALLAN DOWEL.

* * *

FOR SALE

Tri-ang Super 4 Track: 38 feet of straight, large radius curves and flexible track; one left-hand electric point and switch. Used only for one hour.

Sell part or whole for little over half price.

DAVID HUTCHISON,
78 Albany Crescent,
Aspendale, Vic.
Phone 90-5093 (evenings)

The big news this month is that we have made arrangements with a buyer of P.M.G. disposals goods to supply direct to you, the goods listed below. As I have enough on my plate at the moment, John Yourn has agreed to handle them by post only.

We will guarantee that all items are in working order and that relays are suitable for 12-volt working.

Springsets of relays will be on a "pot-luck" basis, unless you specify a certain minimum, in which case there may be an additional charge.

Springsets of keys will be a minimum of two changeover units on each side, unless specially requested to be otherwise.

The 6-volt lamps can be run on 12 volts by connecting two in series or by using a dropping resistor of 200 ohms ½ watt in series. (About 10 cents from a radio shop).

Relays	50c	8 ozs.
Keys (switches) 3-position	20c	5 ozs.
Lamp Jack, with 6v lamp and cap	20c	1 oz.
Jacks, 3-way switchboard	10c	1½ ozs.
Power Packs, 50v, 0.5A output	$3.50	
Terminal Strips (solder and screw) 13 tags	20c	
Terminal Strips (solder and screw) 21 tags	30c	

Postage should be included when ordering, and this will be increasing considerably shortly, so please check the rates first.

(Advt.)

J. YOURN,
30 Coreen Avenue,
Beaumaris, Vic., 3193

PLUGS, SOCKETS, DIODES

Don't forget that I carry stocks continuously now, of the following new items:

20-point plugs and sockets as well as 1 amp and 18 amp diodes.

For prices refer May-June Journal.

Write to A. DOWEL, enclosing suitable postage (address at front).

Branch Notes

VICTORIAN BRANCH NOTES

As the Railways still haven't given us any idea when we may move into our new clubrooms at Northport, branch meetings are still being held at All Saints' Church Hall, Glenferrie Road, Kooyong — not the other way round as I mistakenly reported in the July-August Journal.

Your committee has accepted invitations to display the branch layout at two fetes, one at the end of October and the other in December. We realise that it won't be completed until we finally get to Northport, but we are taking this step to raise much needed funds to enable us to complete it.

By this method — others not being too successful — we hope to have something to erect at Northport when we do move in.

To this end the layout has been shifted to Jack Treseder's basement, which is a lot more cosy to work in than my garage. Work on the wiring proceeds slowly however, but at least we are making progress.

The programme for future meetings is as follows — second Thursday in:

October - testing the layout . . . we hope!!
November - guest speaker
December - business meeting and Christmas party
January - running night or construction on the layout.

Workers are always welcome to help finish the layout. If you can spare a couple of hours any Tuesday at my place, 48 Esdale St., Nunawading, or any Thursday at Jack Treseder's, 55 Creek Rd., Mitcham, give me a ring on 878-7670.

REX LITTLE, Hon. Sec.

* * *

N.S.W. BRANCH

Branch affairs appear to be somewhat in the doldrums at the time of reporting. Your Management Committee continues its search for a home for the clubrooms; meetings have been well attended over the past two months, an average attendance figure of 36 members at each monthly meeting over the last 12 meetings.

Continued next page.

President's Desk

Federal Committee: The nominations for the Federal Committee were again disappointing, leaving outgoing members to re-elect themselves. Is it that members are satisfied with the management of their Association or is it because they are not prepared to give up their time for the benefit of others? Personally, I do not think this is so.

There are quite a lot of members who would like to take part in the management of the association but cannot do so for reasons of distance or because they feel they are not good enough, don't know enough, or are just bashful.

Let me tell you that half the battle is won if you are willing to try.

I have now come to the end of my third term as Federal President and have declined nomination for a further term due to personal reasons. I have enjoyed working with such an energetic and happy committee.

My place is being taken by Eric Doherty and he is no stranger to many members, not only in Victoria, but in other States as well. My cordial good wishes are extended to him and hope that during his term of office he will enjoy the loyalty and co-operation which has been extended to me.

Journal: There are quite a number of points which must be raised on this subject. First and foremost is the subject of articles and photographs. These are now in short supply and the same thing applies to these as to the paragraph above. If you feel you are no good as an author and have an idea for an article, put your ideas down on paper. One of the best articles I have ever read was done this way. It gave the Editor a bit of work rewriting it but at least it was easier than having to think up a subject and write the whole thing himself; which he often does.

Secondly, manuscripts and photographs will not be returned unless a stamped and addressed envelope is supplied. The printer and publisher will take no responsibility for photographs because it is necessary to cut or trim them to fit the space available and it is necessary to attach them to a base for preparation for printing.

If you have a photograph that you would like to send to Journal but are not in possession of a negative, please advise the Editor and arrangements will be made to have the print duplicated before printing. This, however, is extra cost and we do this only on special occasions.

Thirdly, over the last few years we have been offering a prize for the best photo and best article in each issue of Journal. With this issue, this practice will cease as our supply of prizes has run out. Instead, a trophy will be awarded for the best article for the year and one for the best photo of the year. These were mentioned in a previous Secretary's Desk.

A.M.R.A. Policy: This will be expressed only in President's Corner or Secretary's Desk and articles appearing in Journal are accepted and printed as an interest to members and the Committee of Management do not necessarily agree upon points expressed by the author. If a nom-de-plume is used the correct name and address must be supplied to the Editor.

Advertising: Advertisements should not be sent to the Editor — he has quite enough to do without that, but should be sent to A.M.R.A. Publications care of the "Times", Korumburra 3950, Victoria.

In conclusion I would like to wish all members everything they wish themselves.

N. Robinson

◆

N.S.W. Branch Notes (continued)

Whilst this figure is not bad as averages go, the State President (John Dunn) would love to see it doubled each meeting.

June meeting was a layout working afternoon and July saw an afternoon devoted to Railway Films. Both meetings drew above average attendances and were enjoyed by all.

By the time this issue is in your hands we will be just about ready to raise the curtain on 1967 Exhibition — so here's looking forward to meeting you all again.

RUP ACKLAND

The Third European Newsletter

by Ern Raddatz

Returning for the moment to the Jouef VE oast rack coach mentioned previously, a similar vehicle was used on a railway in Western California, the Mt. Talmpas or something; nyway, it is described in the book "Crookedest Railway in the World".

These coaches were, however, I believe, tandard gauge and were hauled by Shay locomotives. The VE coaches have not yet appeard in the shops, so I cannot say if they can e standard "gauged", but they could be converted to HOn3 gauge.

So if you HOn3 fiends want an unusual train, aul two or three of these cars, converted, of ourse, to HOn3, behind a HOn3 Shay. If left s they are, I feel they would be terrific behind n Eggerbahn steam tram loco.

One of the best-loved steam locomotives in Germany is the ex-Prussian P8, which entered he DR and DB as the class 38. Three variations of this locomotive (four if you include the Americanised version) are available from the Austrian firm of Lilliput. One shows it in its DR (and early DB) form, a second in a rebuilt DB form (the one with the wash-tub tender) and the hird as a type used on the Austrian OeBB.

This locomotive was also used on other railways in Europe, mostly arriving by way of war reparations. The DR type and the Austrian variation are the ones most suitable for conversion to the types used in Belgium, Poland and France, while either the DR type or the Americanised model can be used for the version used on the Rumanian State Railways.

Unfortunately, the new Marklin/Hamo P8 is the post-war rebuilt variant and is, therefore, not suitable for conversion to the types used on foreign systems.

Other models of German steam locomotives can be converted in a similar way. The DR/DB class 44 was sent to France per war reparations as the class 150X and, as you know, this is available from Marklin/Hamo. A new variation is being produced by Marklin as the version used on the Danish D.S.B. The French sold 52 of the 150X class to the Turkish State Railways, so if you want a Turkish engine, this is it! The Marklin class 44 can also be converted to types used on the Turkish railways.

The Fleischmann model of the G8 is also available as a French engine (war reparation again!) and the prototype was also used in Belgium, Luxemburg, Poland, Rumania and Turkey.

The DR class 42 Kreiglok, which is available from Rivarossi and Trix Express, represents an engine that was widely used throughout Europe in both the war-time and post-war variations. Among the countries using them were Denmark, Belgium, Poland and Luxemburg (who liked the 42 so much they had some built after the war), Rumania, Yugoslavia, Hungary, the Soviet Union (only a few however, the Russians preferred the lighter 52), India (post-war built in Czechoslovakia), China (also post-war built) and Czechoslovakia.

By altering the cab windows on the Marklin/Hamo class 44 and using the wash-tub tender, you can come up with a representation of the class 50UK which was also a Kreiglok and used in Poland and the Soviet Union, while the tender from the class 44 can be used with the Rivarossi/Trix class 42 as a variation of the class 42.

For a model of a less well known prototype, use the Japanese made model of the Frisco 2-10-0. The prototype is not of course German, but Russian. During the First World War, the Czarist railways ordered a number of 2-10-0s from America.

Some were delivered prior to the Revolution and the delivery of the remainder was stopped by the U.S. Government after the Communist take-over. The undelivered locos were converted to the standard gauge and sold to a number of U.S. roads, including the Frisco and the Frisco 2-10-0 is a model of one of these locos.

The same design was used for 2-10-0s sent to Russia as part of lease-lend during the Second World War. So if you want a Russian engine, convert the Frisco 2-10-0.

Photos of the Russian version appeared

some years ago in "Trains" magazine, so I would advise you to contact the editor of this magazine for information necessary for the job, but of course, there is nothing to stop you contacting the Russians directly. However, I doubt if you will get any info. from them — best bet is to try "Trains".

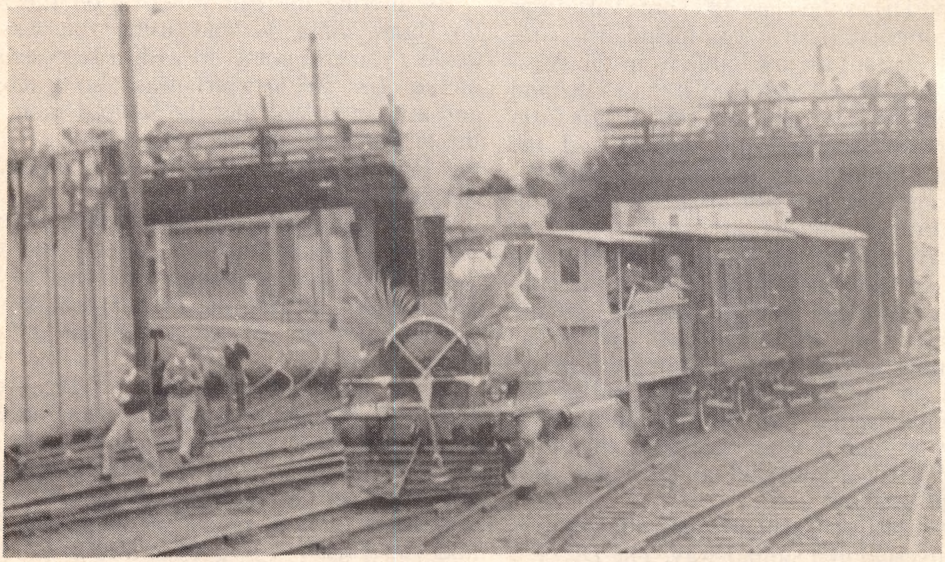
There is another locomotive which was shown at Nuremburg, of interest to followers of German prototype. This is the Romford made model of the Prussian P6, which was called class 37 0-2 by the DR. I doubt if any lasted till DB times. This locomotive is a 2-6-0 and has the distinctive Prussian appearance. The model is of typical English kit construction and, unlike other W. and H. kits for German locomotives, which had cast bodies to fit Marklin mechanisms, this one is complete with frame, wheels and 'Ks' motor.

I intend to get one on my return to England. Price should be around £5 to £7 Sterling. If you are interested, details about the model should have appeared in the English model press by now, so write to W. and H. Models, New Cavendish Street, London, NW.1.

What the growing band of HO2½ enthusiasts requires are bogies and decent track and points. The only 9 m.m. gauge tracks available with a relatively wide range of points are those made for N gauge and they are, therefore rather oversleepered for HOn2½ use. The sleepers are rather small as well. Of course there is the OOO gauge Streamline track made by Peco, but let's see you convince the Puffing Billy Preservation Society that this track is representative of the V.R. narrow gauge!

Peco OOO gauge and the Eggerbahn and VE tracks are quite suitable for quarry and industrial use, but are not at all suitable for general light railway work. For one thing twice as many sleepers are required.

The bogies needed are both Archbar and Fox. The former is quite often used overseas, although Archbar, Fox and Bettendorf are used in South Africa and Fox is standard on the V.R. So here is an opening for a would-be manufacturer of model railway items.



A10 leaving Ipswich for Grandchester for Old Railway Centenary celebrations on July 31, 1966. A10 Class No. 6 of Q.G.R. built by Neilson and Co., Glasgow 1865.